WHAT IS CLAIMED IS:

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 A method for forming a silicide conductive structure on a semiconductor device, the method comprising:

depositing metal on the surface of a patterned semiconductor film;

heat treating the semiconductor film on which the metal is deposited;

removing residual metal that did not react during the 10 heat treating step; and

repeating the depositing step, the heat treating step, and the removing step once or a number of times.

2. The method for manufacturing the semiconductor device according to claim 1, further comprising:

heat treating the semiconductor film after the repeating step at a temperature that is higher than that of the heat treating step.

3. The method for manufacturing the semiconductor device according to claim 2, wherein the patterned semiconductor film is an N-type semiconductor.

A method for manufacturing a semiconductor device, 25 comprising:

forming a conductive portion on the substrate, wherein the conductive portion includes a gate electrode;

forming a spacer on a side wall of the gate electrode; depositing metal on the surface of the substrate including the conductive portion;

applying silicide on the conductive portion in a selfaligned manner by heat treating the substrate on which the metal is deposited; removing residual metal that did not react during the heat treatment; and

repeating the depositing step, the silicide applying step, and the removing step once or a number of times.

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5. The method for manufacturing the semiconductor device according to claim 4, further comprising:

heat treating the substrate after the repeating step at a temperature that is higher than that of the heat treating step .

- 6. The method for manufacturing the semiconductor device according to claim 5, wherein the conductive portion to which silicide is applied is an N-type semiconductor.
- 7. The method for manufacturing the semiconductor device according to claim 4, wherein the thickness of the gate electrode is 1,000Å (10^{-8}cm) to 2,500Å (10^{-8}cm) , and the heat treating is repeated in a temperature range of 600°C to 720°C.
- 8. The method for manufacturing the semiconductor device according to claim 7, further comprising:

heat treating the substrate after the repeating step for 30 seconds at a temperature of about 850°C.

9. The method for manufacturing the semiconductor device according to claim 8, wherein the conductive portion to which silicide is applied is an N-type semiconductor.